CLAIMS

What is claimed is:

1. An electrical lead having proximal and distal ends, the lead comprising:

an electrically conductive connector;

an electrically conductive transitional coil in electrical contact with the connector and running from the connector toward the distal end of the lead;

an elongate wire conductor; and

an electrically conductive coupling establishing electrical contact between the transitional coil and the wire conductor.

2. The electrical lead of claim 1, and further comprising an electrically insulative connector boot disposed around the transitional coil, the coupling, and at least a proximal portion of the wire conductor.

3. The electrical lead of claim 2, and further comprising an electrically insulative distal lead body member disposed over at least a portion of the wire conductor and the coil conductor in a region distal of the coupling and the connector boot.

4. The electrical lead of claim 1, wherein the wire conductor is a single wire strand.

5. The electrical lead of claim 1, wherein the wire conductor is a multi-stranded wire cable.

6. The electrical lead of claim 1, and further comprising a coil conductor electrically connected to the connector and running along the lead generally parallel to the transitional coil and the wire conductor.

7. The electrical lead of claim 6, wherein the coil conductor is disposed inside the transitional coil in a part of the lead.

8. The electrical lead of claim 6, wherein the coupling includes structure defining a channel and wherein the coil conductor is disposed inside the channel.

9. The electrical lead of claim 1, and further comprising a connector sleeve configured to receive an end of the wire conductor, wherein the connector sleeve is securable to the wire conductor and configured to secure the wire conductor in electrical contact with the coupling.

10. The electrical lead of claim 9, wherein the coupling includes structure defining a connector sleeve receiver configured to receive the connector sleeve in electrical contact with the coupling.

11. The electrical lead of claim 1, wherein the coupling includes structure defining a coil receiver configured to receive the transitional coil in electrical contact with the coupling.

12. The electrical lead of claim 11, wherein the coil receiver is an opening in the coupling configured to receive an end of the transitional coil in electrical contact with the coupling.

13. The electrical lead of claim 11, wherein the coil receiver is a projection on the coupling, wherein the transitional coil is configured to be received over the projection in electrical contact with the coupling.

14. The electrical lead of claim 13, wherein the projection is a generally cylindrical body on the coupling.

15. The electrical lead of claim 9, wherein the connector includes first and second electrically conductive connection components that are electrically isolated from one another, and wherein the transitional coil is electrically connected to the first of the two connection components.

16. The electrical lead of claim 15, wherein the two connection components are a connector ring and a connector pin.

17. The electrical lead of claim 16, wherein the connector is an IS-1 standard electrical connector.

18. The electrical lead of claim 15, and further comprising a coil conductor in electrical contact with the second of the two connection components and electrically isolated from the first connection component, the transitional coil, the coupling, and the wire conductor.

19. The electrical lead of claim 18, wherein the two connection components are a connector ring and a connector pin.

20. The electrical lead of claim 19, wherein the transitional coil is in electrical contact with the connector ring and the coil conductor is in electrical contact with the connector pin.

21. The electrical lead of claim 20, wherein the connector is an IS-1 standard electrical connector.

22. The electrical lead of claim 18, and further comprising an electrically insulative connector boot disposed around the transitional coil, the coupling, and at least a proximal portion of the wire conductor.

23. The electrical lead of claim 22, and further comprising an electrically insulative distal lead body member disposed over at least a portion of the wire conductor and the coil conductor in a region distal of the coupling and the connector boot.

24. An implantable electrical lead having proximal and distal ends, the lead comprising:

a connector at the proximal end of the lead, the connector comprising an electrically conductive connector ring, and an electrically conductive connector pin, wherein the connector ring and the connector pin are electrically isolated from one another;

a first conductor in electrical contact with the connector pin and running from the connector pin toward the distal end of the lead;

an electrically conductive transitional coil disposed around the first conductor, wherein the transitional coil is in electrical contact with the connector ring and electrically isolated from the first conductor, wherein the transitional coil has a distal end proximal of a distal end of the first conductor;

an electrically insulative connector boot disposed around the transitional coil, wherein the connector boot has a distal end distal of the distal end of the transitional coil;

an elongate wire conductor disposed parallel to the first conductor, the wire conductor having a proximal end proximal of the distal end of the connector boot;

an electrically conductive coupling between the transitional coil and the wire conductor, wherein the coupling includes structure defining a channel, wherein the first conductor runs through the channel, and wherein the first conductor is electrically isolated from the coupling; and

an electrically insulative elongate distal lead body member disposed about the wire conductor and the first conductor in a region distal of the distal end of the connector boot.

25. The implantable electrical lead of claim 24, wherein the first conductor is a coil conductor.

26. The implantable electrical lead of claim 24, wherein the coupling includes a connector sleeve that is securable to the wire conductor and configured to secure the wire conductor in electrical contact with the coupling.

27. The implantable electrical lead of claim 26, wherein the coupling includes structure defining a connector sleeve receiver configured to receive the connector sleeve in electrical contact with the coupling.

28. The implantable electrical lead of claim 24, wherein the coupling includes structure defining a coil receiver configured to receive the transitional coil in electrical contact with the coupling.

29. The implantable electrical lead of claim 28, wherein the coil receiver is an opening in the coupling configured to receive an end of the transitional coil in electrical contact with the coupling.

30. The implantable electrical lead of claim 28, wherein the coil receiver is a projection on the coupling, and wherein the transitional coil is configured to be received over the projection in electrical contact with the coupling.

31. The implantable electrical lead of claim 30, wherein the projection is a generally cylindrical body on the coupling.

32. An electrical coupling for maintaining electrical contact between a coil conductor and a wire conductor, the coupling comprising:

an electrically conductive coupling body, the coupling body including:

structure defining a channel configured to receive an elongate body running through the channel;

structure defining a connector sleeve receiver; and

structure defining a coil receiver configured to receive the coil conductor and hold it in electrical contact with the coupling body; and

a connector sleeve configured to be received into the connector sleeve receiver, wherein the connector sleeve is configured to receive the wire conductor and hold it in electrical contact with the coupling body.

33. The electrical coupling of claim 32, wherein the connector sleeve is formed at least in part of an electrically conductive material.

34. The electrical coupling of claim 32, wherein the coil receiver is an opening in the coupling body configured to receive an end of the coil conductor in electrical contact with the coupling body.

35. The electrical coupling of claim 32, wherein the coil receiver is a projection on the coupling, wherein the coil conductor is configured to be received over the projection in electrical contact with the coupling body.

36. The electrical coupling of claim 35, wherein the projection is a generally cylindrical body on the coupling body.

37. An electrical lead comprising:

a first coil conductor;

a first wire conductor;

a first coupling holding the first coil conductor in electrical contact with the first wire conductor;

a second coil conductor;

a second wire conductor; and

a second coupling holding the first coil conductor in electrical contact with the second wire conductor.

38. The electrical lead of claim 37, wherein at least one of the couplings is a crimp coupling crimped onto at least one of the wire conductors.